

# Work Order ID 72207

Wednesday, July 20, 2011 7:52:12 AM



Page 1

Item ID: D3564-11

Accept



Setup Start



Revision ID:

Item Name: Wearshoe

Stop



Start Date: 7/19/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 7/26/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan:                     

Date: 11-07-20 Tooling:                     

Date:                     

Run Start



QC:                     

Date:                      SPC (Y/N):                     

Date:                     

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3564

Rev D

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3564 \*\*\*\*\* (D3564-1F) \*\*\*\*\* ☒ Dwg Rev: D ☐ Prog

304 . 063

Rev: D ☐ 2-Deburr if necessary

B11-8-4

(14)

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

B11-8-4

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

Suloblos

(14)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_






NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



**NOTE:** Date & initial all entries




# Work Order ID 72207

Wednesday, July 20, 2011 7:52:12 AM

Page 2

Item ID:	D3564-11	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Wearshoe					
Start Date:	7/19/2011	Start Qty:	12.00		Cust Item ID:	
Required Date:	7/26/2011	Req'd Qty:	12.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	NC BRAKE	0.00				(14)			
Brake NC	Memo	0.00							
Brake NC	Deburr if necessary <input type="checkbox"/> Form on Brake as per Dwg D3564 using Jigs DT8179								
140 	QC5- Inspect part completeness to step on W/O	0.00				(14)			
QC	Memo	0.00							
Quality Control									
150 	Large Fab	0.00				X14			
Large Fab	Memo	0.00							
Large Fab	Qty Description Batch <input type="checkbox"/> A/R 2059B Hardcoat								
	<del>Weld</del> Weld hardcoat as per Dwg D3437								
	MNR196								

SB 11/08/08

SB 11/08/08

X14

~~11-08-09~~  
11-08-09  
Cpl 11-08-09

W/O:		WORK ORDER CHANGES					
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**NOTE:** Date & initial all entries

Wednesday, July 20, 2011 7:52:12 AM

Page 3

**Accept**

**Revision ID:**

**Item Name:** Wearshoe

**Start Date:** 7/19/2011      **Start Qty:** 12.00

**Required Date: 7/26/2011      Req'd Qty: 12.00**

**Reference:**

**Cust Item ID:**

**Customer:**

**Approvals:**

### Process Plan:

**Date:**

### Tooling:

Date:

Run Start

**QC:**

**Date:**

**SPC (Y/N):**

Date:

**Stop**

**Insp.  
Stamp**

160

QC10- Inspect visual per QSI004- ground welds

0.00

QC

## Memo

0.00

## Quality Control

170

QC5- Inspect part completeness to step on W/O

0.00

QC

## Memo

0.00

## Quality Control

180

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

**Powdercoat**

## Memo

0.00

## Powder Coating

START TIME:

7:30pm

**□OVEN TEMPERATURE:**

8:00 AM ☐ FINISH TIME:

320%

W/O:		WORK ORDER CHANGES					
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**Work Order ID 72207**

Wednesday, July 20, 2011 7:52:12 AM



Page 4

Item ID: D3564-11

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 7/19/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 7/26/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

200

Identify as per dwg & Stock Location: FP-20

0.00



Packaging

Memo

0.00

Packaging

210

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

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# Picklist Print

Wednesday, July 20, 2011 7:52:19 AM

Page 1

Work Order ID: 72207

Parent Item: D3564-11

Parent Item Name: Wearshoe




Start Date: 7/19/2011

Required Date: 7/26/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 07-03-08 ec  
 IPP Rev:B As per Rev C 07-07-09 JLM  
 IPP Rev:C As per Rev D 07-09-09 JLM Verified By:EC  
 IPP Rev:D Comments revised on Step 5, 6 per B44656 09-02-06 KJ  
 Verified By:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA 		Purchased	No			100	sf	219.4000	1.41	17.81053			
304/316 Sheet .063													

Location

Loc Qty

Loc Code

MAT020

19.4

117275

1.7

117653

17.7

MAT021

200

118217

200

118217

26.  
B11-84

14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	72207
<b>Description:</b> Wearshoe		<b>Part Number:</b>	D3564-11
<b>Inspection Dwg:</b> D3564 <b>Rev:</b> D		<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article      ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.227	+/-0.010	3.227	✓		V RB02	
2.432	+/-0.010	2.438	✓		V	
2.50	+/-0.030	2.50	✓		V	
6.000	+/-0.010	6.00	✓		T RB01	
12.104	+/-0.010	12.104	✓		T	
18.000	+/-0.010	18.000	✓		T	
18.00	+/-0.030	18.00	✓		T	
9.00	+/-0.030	9.00	✓		T	
11.50	+/-0.030	11.50	✓		T	
0.300 x 0.300	+/-0.010	299 x 301	✓		V	
Ø0.188	+0.005/-0.001	.189	✓		V	
R0.375	+/-0.010	.375	✓		R.G	
0.063	+/-0.010	.061	✓		V	

<b>Measured by:</b> RB	<b>Audited by:</b> S	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 11-8-4	<b>Date:</b> 11/02/05	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	07.09.06	New Issue	KJ/JLM	
B	07.11.23	Dwg Rev updated	KJ/EC/DD	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

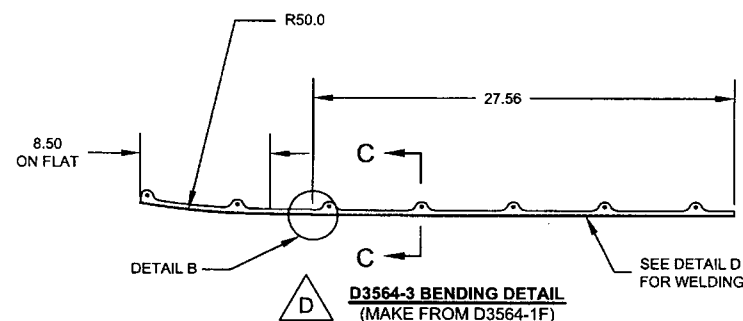
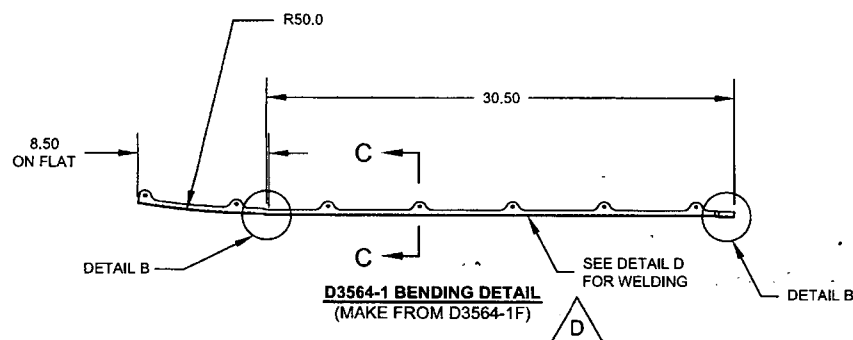
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**NOTE:** Date & initial all entries

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 72207  
110720

RELEASED  
07.09.04

**D3564-1F FLAT PATTERN**



**D3564-1/-3/-5/-7/-9/-11/-13/-15 WEARPLATE NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)  
(REF DART MATERIAL SPEC M304S16GA)
- 2) FINISH: POWDER COAT GREY SANDEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE TABLE IN ZONE A3
- 8) WELD PER DART QSI 004
- 9) SEE PG 3 FOR SECTIONS AND DETAILS
- 10) PARTS ARE SYMMETRIC ABOUT CL

**WEIGHTS:**

D3564-1	1.85 lbs
D3564-3	1.85 lbs
D3564-5	1.93 lbs
D3564-7	1.26 lbs
D3564-9	1.85 lbs
D3564-11	1.85 lbs
D3564-13	0.38 lbs
D3564-15	0.80 lbs

D	UPDATE DRAWING TEMPLATE; CHANGE ALL (TYP X PLS) TO (X PLACES); PG1 A8; UPDATE NOTES; PG1 A8, PG3 B5,C5; ADD D3564-15; PG1 B6,B3: D3564-1/-3 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ON PG1; PG3 B8,C8: D3564-13 WAS ON PG2; PG3 D2: WELDING DETAIL WAS ON PG1 PG3 A5.7,B2: RELOCATE DETAILS AND SECTION; PG3 A5.7,B2: INCREASE DETAIL AND SECTION SIZE	CB	07.08.21
C	MOVE TAB OUTBOARD, DETAIL A	PH	07.04.17
B	ADD AMS 5513 AND AMS 5524	PH	07.03.20
A	NEW ISSUE	PH	06.12.18
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	CB		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH		
DATE	07.08.21		
<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3564 TITLE WEARSHOE SCALE 1:8 REV. D SHEET 1 OF 3 COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

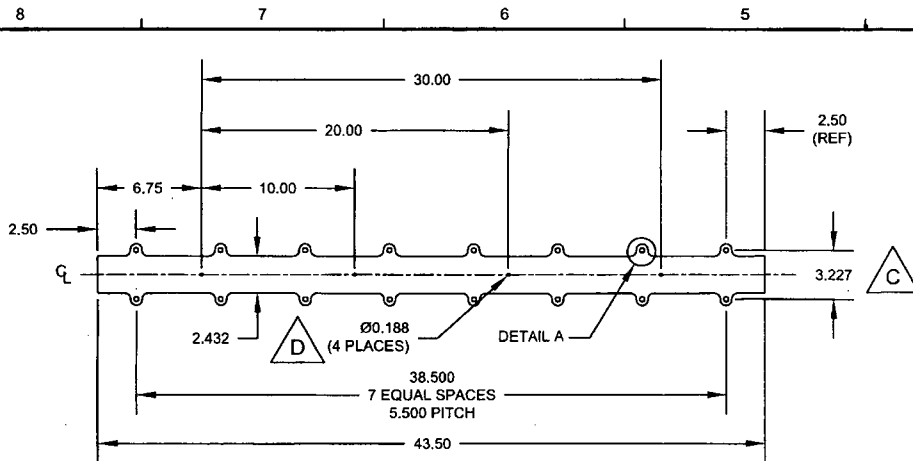
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

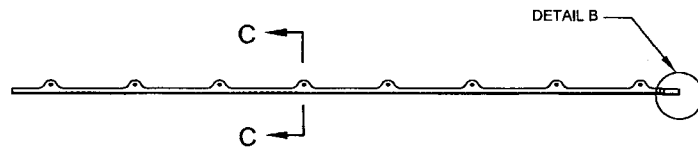
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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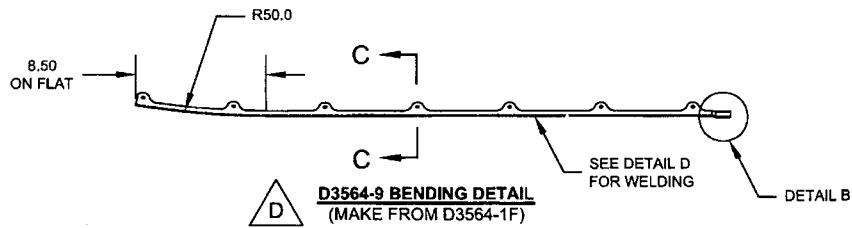
**NOTE:** Date & initial all entries



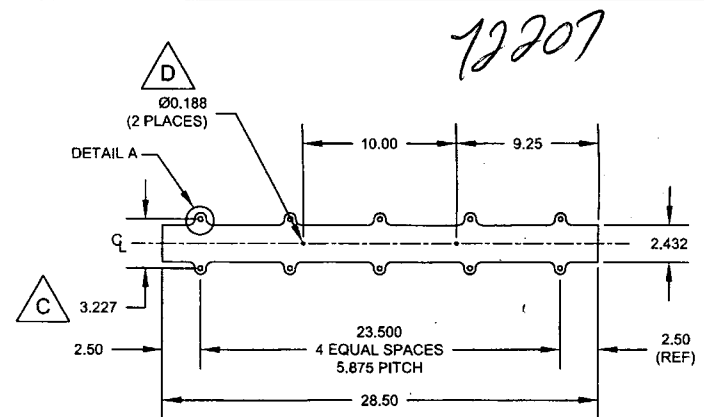
**D3564-5F FLAT PATTERN**



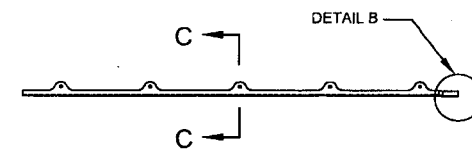
**D3564-5 BENDING DETAIL**  
(MAKE D3564-5 FROM D3564-5F)



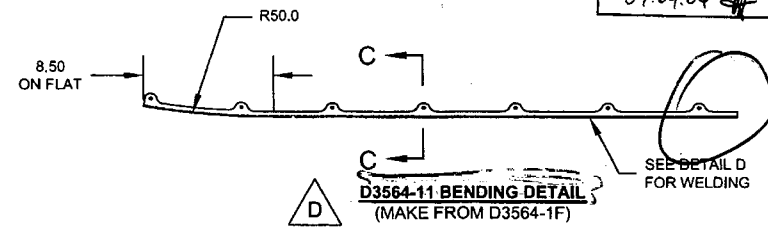
**D3564-9 BENDING DETAIL**  
(MAKE FROM D3564-1F)



**D3564-7F FLAT PATTERN**



**D3564-7 BENDING DETAIL**  
(MAKE D3564-7 FROM D3564-7F)



**D3564-11 BENDING DETAIL**  
(MAKE FROM D3564-1F)

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 2 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
DATE	07.08.21	<small>COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

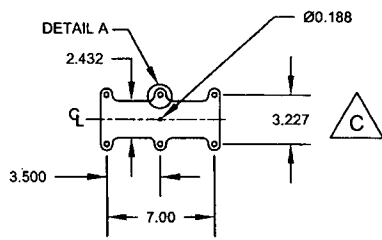
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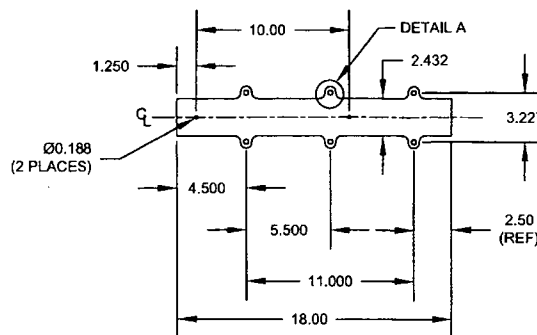
**NOTE:** Date & initial all entries



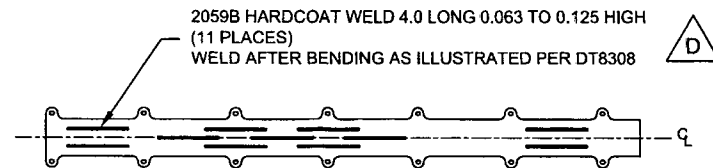
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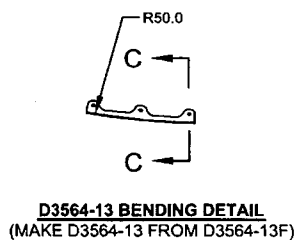
**D3564-13F FLAT PATTERN**



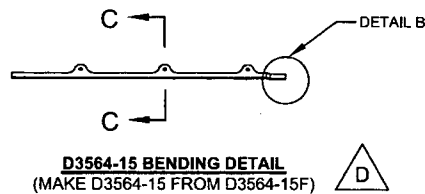
**D3564-15F FLAT PATTERN**



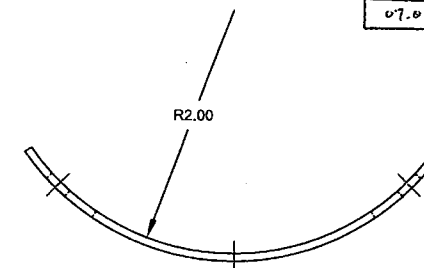
**DETAIL D**  
(D3564-1/-3/-9/-11 WELDING DETAIL)



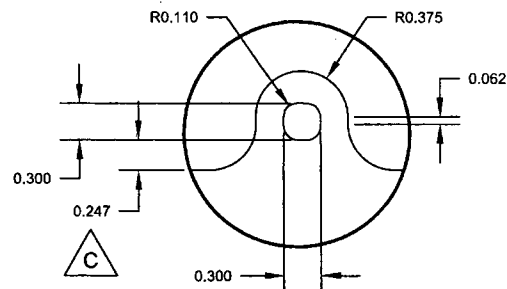
**D3564-13 BENDING DETAIL**  
(MAKE D3564-13 FROM D3564-13F)



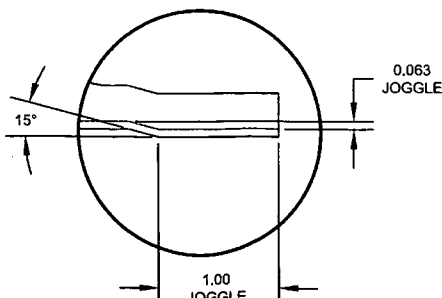
**D3564-15 BENDING DETAIL**  
(MAKE D3564-15 FROM D3564-15F)



**SECTION C-C**  
SCALE 1:1



**DETAIL A**  
SCALE 1:1



**DETAIL B**  
SCALE 1:1

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 3 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:
DATE	07.08.21	COPYRIGHT © 2006 BY DART AEROSPACE LTD	
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RELEASED

07.09.04

72207

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